



Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-27 (**canceled**).

28. **(new)** An isolated polynucleotide comprising:

(a) a nucleotide sequence encoding a polypeptide having Aspartate kinase activity, wherein the polypeptide has an amino acid sequence of at least 80% sequence identity, based on the Clustal V method of alignment, when compared to one of SEQ ID NO: 6 or 8 or

(b) a complement of the nucleotide sequence, wherein the complement and the nucleotide sequence consist of the same number of nucleotides and are 100% complementary.

29. **(new)** The polynucleotide of Claim 28, wherein the amino acid sequence of the polypeptide has at least 85% sequence identity, based on the Clustal V method of alignment, when compared to one of SEQ ID NO: 6 or 8.

30. **(new)** The polynucleotide of Claim 28, wherein the amino acid sequence of the polypeptide has at least 90% sequence identity, based on the Clustal V method of alignment, when compared to one of SEQ ID NO: 6 or 8.

31. **(new)** The polynucleotide of Claim 28, wherein the amino acid sequence of the polypeptide has at least 95% sequence identity, based on the Clustal V method of alignment, when compared to one of SEQ ID NO: 6 or 8.

32. **(new)** The polynucleotide of Claim 28, wherein the amino acid sequence of the polypeptide comprises one of SEQ ID NO: 6 or 8.

33. **(new)** The polynucleotide of Claim 28 wherein the nucleotide sequence comprises one of SEQ ID NO: 5 or 7.

34. **(new)** A vector comprising the polynucleotide of Claim 28.

35. **(new)** A recombinant DNA construct comprising the polynucleotide of Claim 28 operably linked to at least one regulatory sequence.

36. **(new)** A method for transforming a cell, comprising transforming a cell with the polynucleotide of Claim 28.

37. **(new)** A cell comprising the recombinant DNA construct of Claim 35.

38. **(new)** A method for producing a plant comprising transforming a plant cell with the polynucleotide of Claim 28 and regenerating a plant from the transformed plant cell.

39. **(new)** A plant comprising the recombinant DNA construct of Claim 35.

40. **(new)** A seed comprising the recombinant DNA construct of Claim 35.

41. **(new)** A method for isolating a polypeptide encoded by the polynucleotide of Claim 28 comprising isolating the polypeptide from a cell containing a recombinant DNA construct comprising the polynucleotide operably linked to a regulatory sequence.

42. **(new)** A transgenic plant having an altered level of at least one free amino acid in seed when compared to a nontransgenic plant of the same species, said plant comprising a nucleic acid fragment from aspartate kinase, said nucleic acid fragment capable of altering endogenous expression of said free amino acid and has been introduced into the plant by transformation.

43. **(new)** A transgenic corn plant having an increased level of free threonine in seed when compared to a nontransgenic corn plant, said plant comprising a nucleic acid fragment encoding a polypeptide having aspartate kinase activity, wherein the polypeptide has an amino acid sequence of at least 80% sequence identity, based on the Clustal V method of alignment, when compared to one of Seq Id No.: 6 or 8, and wherein said nucleic acid fragment is capable of altering endogenous expression of said free amino acid and has been introduced into the corn plant by transformation.

44. **(new)** The plant of claim 42 wherein said plant is a monocot or a dicot.

45. **(new)** The plant of claim 42 wherein said plant is corn or soybean.

46. **(new)** The plant of claim 42 wherein said free amino acid is threonine, aspartate, lysine or methionine.

47. **(new)** The plant of claim 42 wherein said free amino acid is threonine.

48. **(new)** The plant of claim 42 wherein an altered level is an increased level or a decreased level of said free amino acid when compared to the level of said free amino acid in a nontransgenic plant of the same species.